

**Table 10. Nature and Extent of Soil to be Remediated, Park Soil Pre-Design Sampling, Northrop Grumman Systems Corporation, Operable Unit 3
(Former Grumman Settling Ponds), Bethpage, New York.**

Area	Parameter	Remedial Depth Interval (ft bls)	Remedial Action Objectives (mg/kg) ⁽²⁾	Nature and Extent of Soils to be Remediated ⁽²⁾	Impacted ⁽³⁾ Volumes (cy)			
Ball Field - PCB Removal Area ⁽¹⁾	PCBs	0-2	1	<ul style="list-style-type: none"> There are three, depth-specific RAOs for PCBs in the ball field The areal extents of PCB impacts that exceed the 0-2, 2-10, and >10 foot remedial depth interval RAOs are shown on Figures 5A and 5B. 	3,500			
		2-10	10		10,100			
		10-25	50		4,200			
	Chromium Sludge	0-25	Remove chromium sludge co-located with PCB-impacted soil to extent necessary to achieve PCB RAOs	<ul style="list-style-type: none"> Discrete pockets co-mingled with PCB-impacted Park Soils. 	-- ⁽⁴⁾			
	Metals ⁽⁵⁾	0-10	Chromium	180	<ul style="list-style-type: none"> The areal extents of metal impacts that exceed the 0-2 and 2-10 foot remedial depth interval RAOs are shown on Figures 7A and 7B. 	-- ⁽⁴⁾		
			Cadmium	4.3				
			Arsenic	16				
Ball Field - Outside of PCB Removal Area	Metals ⁽⁵⁾	0-2	Chromium	180	<ul style="list-style-type: none"> The areal extents of metal impacts that exceed RAOs are shown on Figures 7A and 7B. 	300		
Access Road			Cadmium	4.3				
			Arsenic	16				
PCBs	0-2	1	<ul style="list-style-type: none"> There are two, depth-specific RAOs for PCBs in the Access Road. The areal extents of PCB impacts that exceed the 0-2 and 2-10 ft remedial depth interval RAOs are shown on Figure 5A and 5B. 	3,300				
	2-10	10		500				
Eastern Portion of Park	Chromium	0-2	180	<ul style="list-style-type: none"> The areal extents of chromium impacts that exceed RAOs are shown on Figures 7A and 7B. 	300			
	PCBs, Metals ⁽⁵⁾	0-2	PCB	1	<ul style="list-style-type: none"> The areal extent of PCBs and metals impacts that exceed RAOs are shown on Figures 5B and 7B, respectively.. 	2,000		
			Chromium	180				
			Cadmium	4.3				
			Arsenic	16				
					Combined Total	24,200		

Notes:

- (1) PCB Removal Area – area within the ball field (defined laterally & vertically) where soil will be remediated to achieve the following PCB RAOs: greater than 1 mg/kg from 0 to 2 feet, greater than 10 mg/kg from 2 to 10 feet, and greater than 50 mg/kg from 10 to 25 feet.
- (2) Clean Up Criteria and RAOs provided in the NYSDEC-issued OU3 ROD dated March, 2013.
- (3) Volumes of impacted soils were estimated for the sub-areas from EVS modelling conducted by ARCADIS. Volumes are rounded up to the next hundred cubic yards.
- (4) These volumes are included in the PCB impacted volumes.
- (5) Metals include cadmium, chromium and arsenic.

Acronyms:

cy	cubic yards
ft bls	feet below land surface
metals	Includes one or more of the following: arsenic, cadmium, and chromium
mg/kg	milligrams per kilogram
NYSDEC	New York State Department of Environmental Conservation
OU3	Operable Unit 3
PCBs	polychlorinated biphenyls
RAOs	Remedial Action Objectives
ROD	Record of Decision